

TO: ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES & SERVICE CENTERS
ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES REPRESENTATIVES

MODELS AFFECTED: XLU152, XLU1515

ITEM: DESIGN CHANGES TO IMPROVE RADIO PERFORMANCE
IN HIGH SYSTEMS NOISE ENVIRONMENTS

DISPOSITION:

XLU152 and XLU1515 radios manufactured after May 1982 have the following changes incorporated. They are subdivided into four basic groups:

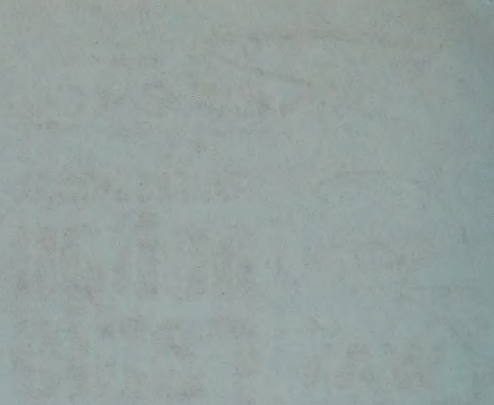
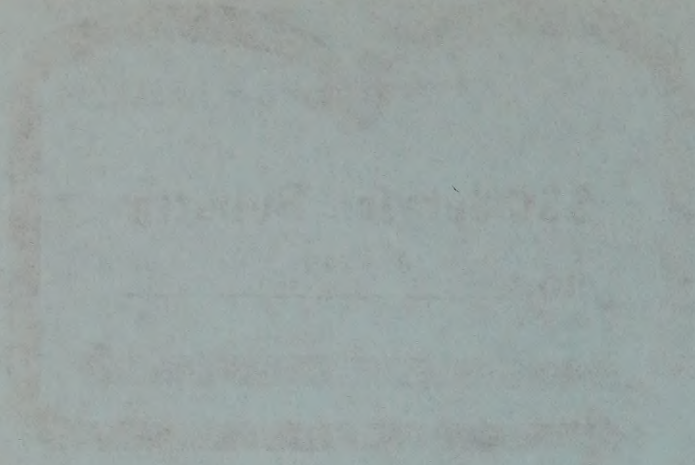
1. Chassis modifications
2. VCO Board modifications - up to Rev. "C" only
3. PA Board modifications - up to Rev. "B" only
4. Main Board modifications - up to Rev. "C" only

After modification, the radios have been returned using the standard tuneup procedure TP-14-344. Revised schematics are included in this service bulletin.

(1) and (2) Chassis and VCO Board modifications

- a. The following capacitors have been added to the mic connector as per Diagram #4, using as short a lead length as possible:

C1 = 47pF on Pin 1 to ground	(1524-0470-002)
C2 = 47pF on Pin 3 to ground	(1524-0470-002)
C3 = 47pF on Pin 4 to ground	(1524-0470-002)
C4 = 47pF on Pin 5 to ground	(1524-0470-002)



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- b. The following caps have been added to the VCO Board (see Diagram #1)

C207 = 47pF (1524-0470-002)

C214 = 47pF (1524-0470-002)

and C200 changed from 150pF to .01μF (1502-0103-004)

- c. Upon reassembling the VCO Board to the Main Board, the 8V connection was isolated by applying a chamfer to the Main Board (see Diagram #5). Also the mic connector wires were dressed away from the VCO Board flush with the chassis wall and Main Board (to avoid microphonic effects).

(3) PA Board Modifications (See Diagram #3)

Changed C318 to 1507-0101-002

Changed C325, C320 and C309 to 47pF (1524-0470-002)

Changed C314 to 2-10pF (1517-0000-043)

Added C328 = 47pF (1524-0470-002)

Added C327 = 47μF 16V (1513-0470-002)

It has been ensured that components on PA Board do not have long lead lengths.

(4) Main Board Modifications (See Diagrams #2 and #6)

Moved C537 to underside of board

Removed R516 = 330Ω

Changed C534 to 150pF (1538-0151-601)

Changed C535 to 47pF (1524-0470-002)

Added R209 = 100Ω (4704-0101-032) in series with 8V supply to VCO Board

Added C215 = 47pF (1524-0470-002)

Added R516 = 220Ω (4704-0221-032) at L501 input to ground on underside

Changed C543 to 1000μF 16V (1513-3254-717) and changed position to across C537

Added ground strap from Main Board to front panel (6011-0000-002)

Re-routed VCO coax and R600 - grounded coax to R606 ground

Added C5 = 47pF (1524-0470-002) from V+ line to chassis at power connector using as short a lead length as possible.

Added ground strap from Main Board to back plate (6001-0000-002)

TOTAL REPAIR PARTS REQUIREMENT

<u>DEVICE</u>	<u>PART NUMBER</u>	<u>QUANTITY</u>
47pF	1524-0470-002	13
100pF	1507-0101-001	1
150pF	1538-0151-601	1
.01μF	1502-0103-004	1
2-10pF	1517-0000-043	1
47μF 16V	1513-0470-002	1
1000μF 16V	1513-3254-717	1
100 Ω	4704-0101-032	1
220 Ω	4704-0221-032	1
Braid	6011-0000-002	1.5"

TECHNICAL SERVICE DEPARTMENT

REGENCY COMMUNICATIONS, INC.

DIAGRAM # 1 VCO BOARD

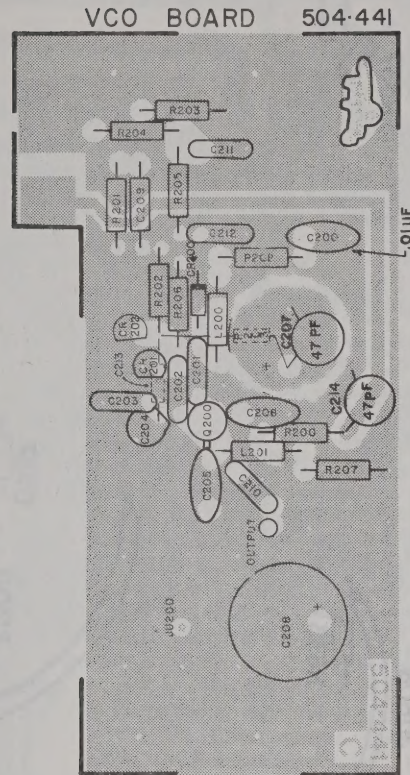
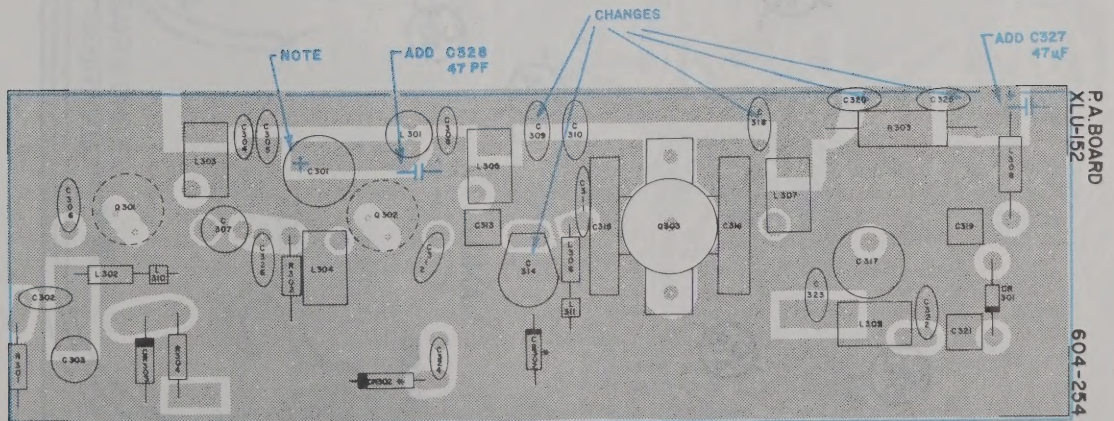
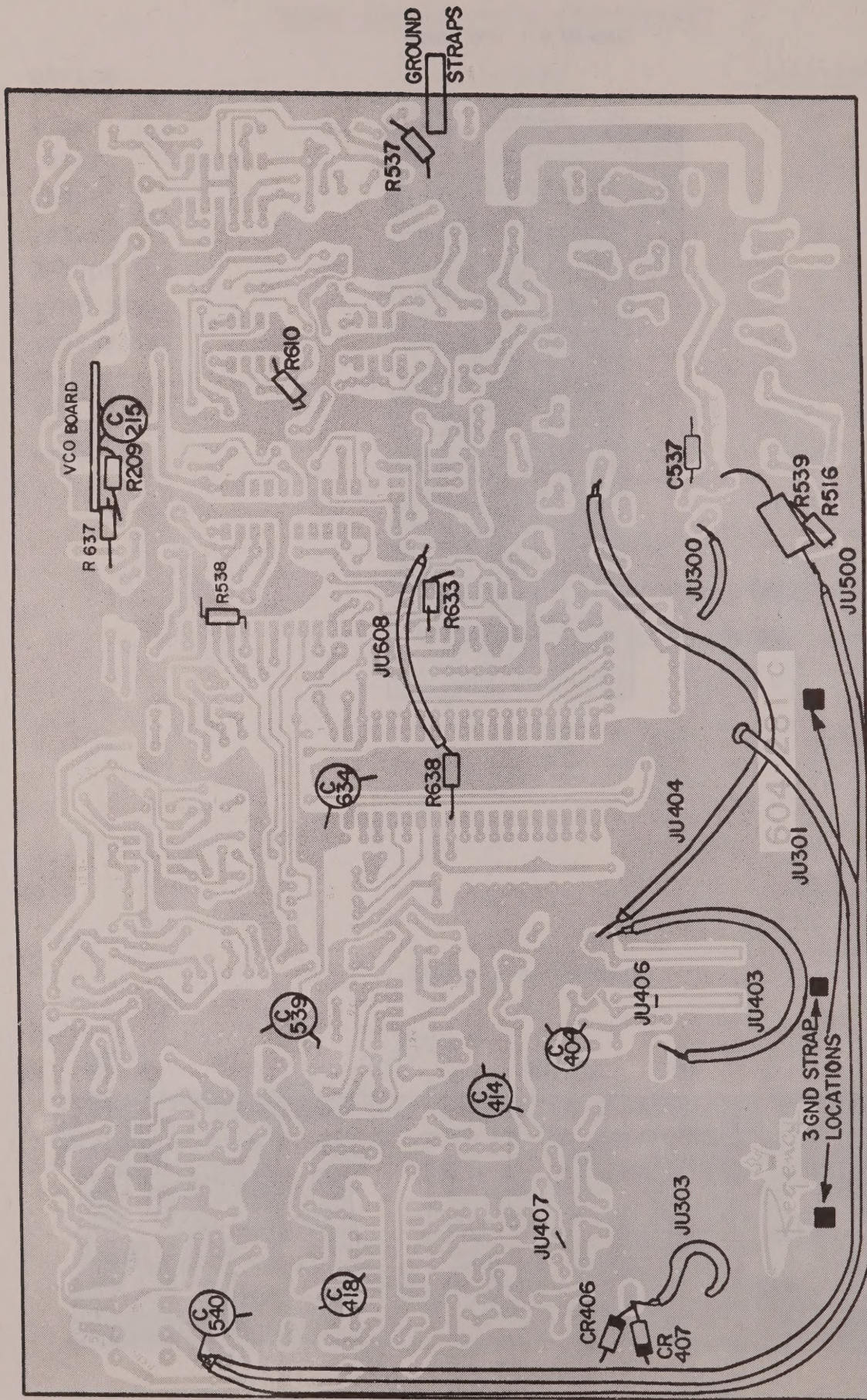


DIAGRAM # 3 - PA BOARD





DIAGRAM# 2

XLU
152

PARTS PLACEMENT
BOTTOM SIDE

DWG NO.
104-476 REV C



PARTS PLACEMENT
BOTTOM SIDE

XLU
152

DWG NO.
104-916 81-C